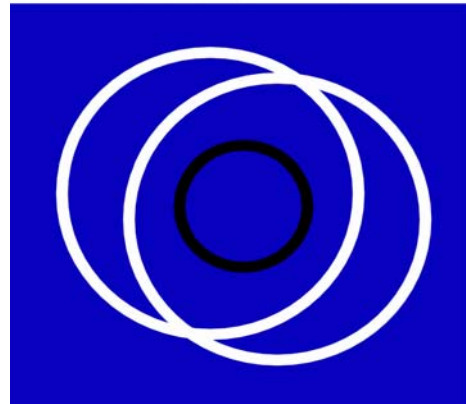


SOA Systems





SOA Methodology (r. 2.0)

The following document contains a revised version of the Top-Down Service Delivery Strategy as part of release 2.0 of the SOA Systems Mainstream SOA Methodology. Processes and strategies in the methodology are regularly enhanced to reflect industry developments and trends.

For more information, visit: <http://www.soamethodology.com>

Note that for the convenience of readers, this document has been structured so that the sections provided replace the corresponding sections in "Service-Oriented Architecture: Concepts, Technology, and Design" (by Thomas Erl, ISBN: 0131858580, Prentice Hall).

For more information, visit: <http://www.soabooks.com>

10.2 The top-down strategy

This strategy is very much an "analysis first" approach that requires not only business

processes to become service-oriented, but also promotes the creation (or realignment) of an organization's overall business model. This process is therefore closely tied to or derived from an organization's existing business logic.

The top-down strategy supports the creation of all three of the service layers we discussed in the previous chapter. It is common for this approach to result in the creation of numerous reusable business and application services.

10.2.1 Process Description

The top-down approach will typically contain some or all of the steps illustrated and described in Figure 10.2. Note that this process assumes that business requirements have already been collected and defined.

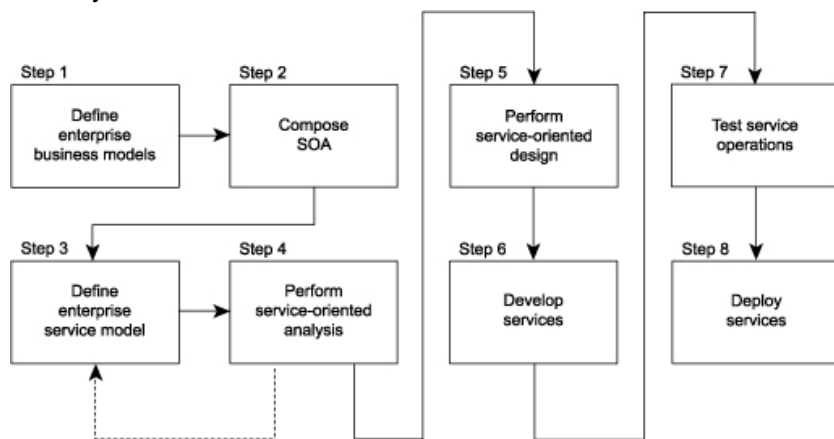


Figure 10.2 – Common top-down strategy process steps.



SOA Methodology (r. 2.0)

Step 1: Define enterprise business models

The format of enterprise models tends to vary across different organizations, each of which will have models that are unique to its business domains. Common types of enterprise model documents include a formal ontology, an enterprise entity model, an enterprise-wide logical data model, a standardized data representation architecture (often realized through a collection of standardized XML Schemas), and other forms of models generally associated with enterprise information architecture.

Some of these models provide business-centric perspectives of an organization that prove extremely valuable sources for deriving business services. Business entity models especially tie directly into the subsequent definition of entity-centric business services.

Although listed as just a single step in our high-level process, the requirements to properly define enterprise models can easily result in the need for one or more separate processes, each of which may require its own project and working group. On the other hand, if the required enterprise business models already exist, then this step may simply consist of their identification.

Step 2: Compose SOA

Step 2 corresponds to the Compose SOA process described in the *Steps to composing SOA* section in Chapter 14. When a top-down strategy is employed, this step is often considered part of the up-front analysis effort required prior to the delivery of services, and is therefore not associated with the service-oriented design phase.

Step 3: Define enterprise service model

This step represents the creation of a specific type of enterprise model known as the *enterprise service model*. This specification provides a formal documentation of a planned service inventory where numerous (and sometimes all) service candidates are defined ahead of time, prior to entering delivery stages. The enterprise service model implements the service layers chosen in Step 2 and thereby establishes a standardized, layered view of an enterprise-wide service portfolio.

You will notice on Figure 10.2 that there is an optional iterative relationship between this step and the service-oriented analysis process. A recommended strategy for creating an enterprise service model is to cycle through the service-oriented analysis process once for every known



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business process, thereby defining and constantly refining service candidates (especially agnostic candidates) prior to actual design and development.

The remaining steps in the process have not changed from what was documented in earlier printings of “Service-Oriented Architecture: Concepts, Technology, and Design” (by Thomas Erl, ISBN: 0131858580, Prentice Hall), except that the step numbers are incremented by one due to the introduction of the new Step 3.

For more information, please visit www.soabooks.com.